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# Record of Decision

## Resurrection Creek Stream and Riparian Restoration Project

### Seward Ranger District, Chugach National Forest

Kenai Peninsula Borough, Alaska



November 2004

R10-MB-541



USDA Forest Service

USDA

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*Record of Decision*

**Resurrection Creek Stream and Riparian Restoration  
Project**

**USDA Forest Service  
Seward Ranger District, Chugach National Forest  
Kenai Peninsula Borough, Alaska**

The analysis area is located in the Western Kenai Mountains ecological section at the northern end of the Kenai Peninsula on the Chugach National Forest. The stream flows northwardly into the Turnagain Arm of Cook Inlet. The town of Hope, Alaska lies adjacent to the mouth of the stream on Turnagain Arm. The project area begins at river mile 4.4 (upstream from tidewater) and extends upstream to river mile 5.8.

***Decision and Reasons for the Decision***

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***Background***

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Resurrection Creek was home to Alaska's first gold rush just over a century ago. Stream placer deposits within the project area were mined using high-pressure water jets (hydraulic mining) during the first three decades of the 1900's. Through the proposed project reach, the valley bottom of Resurrection Creek varies from 300 to 500 feet wide. During mining, soil and vegetation were stripped from the valley bottom. The underlying alluvial sediments were pushed through sluice boxes using high power water jets. In the sluice boxes, gold flakes and nuggets were separated from the processed gravels.

In the mining process, valley bottom alluvial gravels, cobbles, and boulders in the project area were worked down to an underlying clay layer, often 10 or more feet below the ground surface. The location of the river channel was likely moved several times during the hydraulic mining. The coarse alluvial sediments remaining after passing through sluices were pushed into numerous tailings piles along the valley bottom. During the mining process much of the soil, organics, and fine sediments within the mined valley bottom were washed down Resurrection Creek and eventually into Turnagain Arm.

Hydraulic and heavy equipment placer mining impacted much of the lower six miles of Resurrection Creek (Bair et al. 2002). Within the project reach most of the disturbance impacts relate to hydraulic mining. Tailings piles generated from hydraulic mining rise to as much as 25 feet high. Tailing piles occupy the majority of the alluvial valley bottom within the project area. These tailings have disconnected or buried the historic complex of stream channels and wetlands that provided high quality habitat for salmon, bears, bald eagles, moose and other fish and wildlife species. Resurrection Creek flows have done little to alter the tailing piles over the last century. The mine tailings resulted in entrenchment of the stream and cutoff access from the historic floodplain. The direct

impact of disturbance and loss of the stream's ability to access the floodplain have severely altered aquatic habitat and riparian vegetation composition. (Resurrection Creek Stream and Riparian Analysis, November 2002)

### Purpose and Need for Action

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The purpose and need for action of the Resurrection Creek Stream and Riparian Restoration Project displayed in the Final Environmental Impact Statement (FEIS) is to accelerate the recovery of riparian areas, and fish and wildlife habitat on a 0.9 mile segment of Resurrection Creek. Natural recovery from mining impacts has been minimal on this segment of Resurrection Creek. Historic placer mining operations have affected Resurrection Creek by straightening and simplifying the stream, and separating it from its floodplain. These impacts have degraded fish rearing and spawning habitat on Resurrection Creek, as well as adjacent wildlife riparian habitat for species such as bears and eagles. Natural recovery from mining impacts has been minimal on this segment of Resurrection Creek. The proposed project would greatly accelerate the recovery of riparian areas, and fish and wildlife habitat on Resurrection Creek. There is a need to examine a portion of the creek immediately downstream of the project area on private land within the Haun Trust lands. Additional restoration activities may be implemented on the Haun Trust lands if the landowners have sufficient interest in implementing restoration measures. This action responds to the goals and objectives outlined in the Chugach National Forest Revised Land and Resource Management Plan, and helps move the project area towards desired conditions described in that plan. (Chugach LMP, May, 2002).

### Decision

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Based upon my review of public comment and all alternatives, I have decided to implement Alternative 2 which restores 1.1 miles of Resurrection Creek's channel, floodplain and streamside vegetation to pre-mining conditions and enhances fish and riparian wildlife habitat on public and private lands. Restoration activities would also take place on the Haun Trust Lands for about 300 feet, as identified in the agreement. Two temporary bridges would be constructed. About 0.35 miles of new road construction would be required to relocate an existing section of the road to Palmer Creek out of the floodplain. Recreational gold panning would continue to be allowed north (downstream) of the Haun Trust Lands. A closure order would be issued restricting recreational gold panning south (upstream) of the Haun Trust Lands on the project area. To interpret the mining history of the area interpretive panels would be located at the overlook area along the Resurrection Pass Trail.

My decision to implement Alternative 2 includes the following modifications.

1. A mining exhibit including interpretation and period tools may be located in an old mining cabin moved into the community of Hope, Alaska. Development of the mining exhibit would require a cooperative agreement between the Hope Historical Society and the Forest.



2. Expansion of the Resurrection Pass North Trailhead, as displayed in Alternative 3, is included as a component of this decision. The expansion of the trailhead is for an area of approximately 500' by 100'. Expansion would also include replacement of dilapidated signs, wheel stops, parking barriers, and construction of an interpretive kiosk. Funding for this component of the decision would come from recreation capital improvement funds.
3. Additional proposed recreation parking area using tailings waste will not be built. The existing dispersed camping and parking will continue under the current use patterns.

When compared to the other alternatives, Alternative 2 will restore the greatest amount of stream channel on Resurrection Creek within the project area, best meeting the purpose and need of the project. This decision will accomplish the restoration components identified for Resurrection Creek in the Landscape Analysis for the Resurrection Creek Watershed (Hart Crowser, 2002). The analysis identified three main restoration and management components needed for Resurrection Creek: 1) aquatic habitat restoration, 2) vegetation restoration and management, 3) and heritage resources/human uses management.

My decision directly supports the recommendations of the assessment. My decision also supports the findings of the surveys of the project reach by Bair et al. in 2002. These surveys identified that mine tailings produced by placer mining nearly a century ago had significantly altered fish and wildlife habitat within the project reach. The dikes created by the mine tailings prevent fine sediment and organics carried by floods from being deposited on the floodplain, thus preventing natural fertilization and soil augmentation needed to reestablish vigorous riparian communities. Although the disturbance occurred nearly a century ago, riparian vegetation and wildlife habitat have not recovered at a natural rate of succession; 86% of all riparian trees within the disturbed reach are less than 15 cm in diameter with snags and coarse downed wood nearly nonexistent. Without regeneration of riparian vegetation, habitat conditions for bears, bald eagles, moose and salmon, migratory birds, will be extremely limited within the project reach for generations to come (Bair et al. 2002).

The actions proposed under Alternative 2 would generate approximately the equivalent of 3 one-year long jobs during the life of the project. The actual number of specific jobs will not be known until the project is locally or regionally contracted. Most of these anticipated jobs would be associated with stream restoration activities and would occur during 2005 to 2006. The other anticipated jobs would be associated with road construction and environmental interpretation. The limited heavy machinery available in Hope and Sunrise suggests that the machinery would have to come from towns such as Anchorage, Palmer, or Kenai. The project would generate about \$66,992 in total job related income for the duration of the project. Spending associated with the projected job related income would have a minimal effect on the Hope community because of the limited opportunities to spend money in Hope. Indirect income effects will be minimal in Hope and virtually nonexistent regionally because of the relatively small amount of income created by this project.

Development of interpretive panels and exhibits will not only have the direct effect of increasing archaeo-tourism and exhibiting the community's history, they will also provide opportunities to educate the public as to the value of the heritage resources, thus protecting sites from looting and collecting outside of the project area. Under this decision approximately 0.48 miles of stream will be open to gold panning and 1.28 miles would be closed. The remaining areas open to recreational gold panning use would meet most users' expectations though some users will be displaced. Gold panners would be displaced to other designated panning areas potentially increasing crowding, pressure and resource damage in said areas. In addition, there would be potential for permanent displacement of recreational gold panners from the Resurrection Creek drainage. Some users may become frustrated with the Forest closing any area to gold panning.

## ***Environmentally Preferred Alternative***

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Alternative 2 is the environmentally preferred alternative, based on the following merits:

- This alternative would restore between 0.9 miles of stream. The long-term indirect and cumulative effects of implementing this alternative would be the restoration of riparian vegetation, increased spawning substrate, pools and perennial side channel flows and associated over-wintering habitat, which would improve aquatic habitat quantity and quality, fish populations and aquatic invertebrates. Aquatic vertebrate and invertebrate populations are expected to respond positively to the stream channel and riparian rehabilitation. Increased spawning and rearing habitat created by the action alternatives are expected to provide a long-term, net positive benefit to the project reach, the aquatic ecosystem, and fisheries resources for the foreseeable future.
- The Chugach Forest Plan (page 3-13) describes the desired future condition in terms of vegetation: "Vegetation on the Chugach National Forest will be the vegetation that results from natural processes. Selected locations will be altered by management activities either to restore degraded conditions or to provide benefits to wildlife. The abundance and distribution of sensitive plants will be stable. Exotic plant infestations will be decreasing in size." The proposed action, Alternative 2, maximizes the efforts and area involved to move the Resurrection Creek area towards the desired future condition for the Forest.
- Provides the greatest habitat improvement for wildlife due to the greatest amount of restoration.
- Restoration activities will have the greatest impact in returning the project area and overall Resurrection Creek watershed to an ecologically functioning condition. Restoration work will re-establish native vegetation in the riparian corridor where it is currently lacking.



## ***Other Alternatives Considered***

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In addition to the selected alternative, I considered five other alternatives, which are discussed below. A more detailed comparison of these alternatives can be found in the Resurrection Creek Stream and Riparian Restoration FEIS on pages [13-41].

**Alternative 1 (No Action)** Under the No Action alternative, current management plans would continue to guide management of the project area. Under this alternative, no restoration activities would take place in the project area. Other existing and planned activities will continue, such as reconstruction of Resurrection Pass Trail National Recreation Trail. Current fish and wildlife habitat conditions within the project area induced by historic mining activities could conceivably persist for centuries. Mine tailings generated 60 to 100 years ago, are essentially functioning as dikes confining all flood flows to a single channel. The confinement of the stream channel has severely impacted both fish and wildlife habitat. Although the disturbance occurred up to a century ago, riparian vegetation and wildlife habitat have not recovered to a pre-mining condition.

**Alternative 3** would restore 0.9 miles of Resurrection Creek. This alternative includes a temporary bridge over the combined channel of Resurrection and Palmer Creeks. Approximately 0.7 miles of new road construction would occur around the east side of the Haun Trust Lands. An additional 0.35 miles of new road construction would occur to relocate Palmer Creek Road out of the floodplain. Recreational gold panning activities would continue within the project area. Interpretive signs would be installed to display information on the mining history of the area. A cooperative agreement could be developed with the Hope Historical Society to see if mining cabin and interpretive program could be created in Hope.

**Alternative 4**, the DEIS Preferred Alternative, would reconstruct 0.9 miles of Resurrection Creek within the project area. Access to the project would be gained through National Forest lands and an existing easement across private lands. A temporary bridge would cross Resurrection Creek and access the Resurrection Pass National Recreation Trail. The Resurrection Pass National Recreation Trail would be temporarily rerouted during construction to minimize conflicts with trail users and construction activities. Other temporary bridges would be constructed over the Resurrection Creek diversion channel and over Palmer Creek. Approximately 0.43 miles of road would need to be constructed. The Resurrection Pass Trail would be upgraded to a construction road for 0.33 miles. Interpretive programs are the same as Alternative 3.

**Alternative 5** would restore 0.6 miles of the uppermost portion of Resurrection Creek on public lands and 0.2 miles of stream on the Haun Trust Lands. Access including roads and bridges would be done by the same means as described under Alternative 2. Interpretive signs would be installed to display information on the mining history of the area. Interpretive programs are the same as Alternative 3.

**Alternative 6** would reconstruct a 0.5-mile portion of Resurrection Creek immediately upstream (south) of the Haun Trust. Access including roads, bridges and use of the Resurrection Pass Trail; would be done by the same means as described under Alternative 4. Interpretive signs would be installed to display information on the mining history of the area. Interpretive programs are the same as Alternative 3.

## ***Public Involvement***

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As described in the background, the need for this action was highlighted in 2002, when the Landscape Analysis for the Resurrection Creek Watershed (Hart Crowser, 2002) and surveys of the project reach documented by Bair et al. in 2002 were completed. The Notice of Intent (NOI) was published in the Federal Register on October 17, 2003. The NOI asked for public comment on the proposal from October 17, 2003 to November 16, 2003. As part of the public involvement process, the agency held previous scoping efforts. The first effort involved a scoping letter sent on February 5, 2003, and a second letter was submitted to the public on June 6, 2003. Since those notices were provided to the public, the Forest Service gathered more information regarding this proposal, and determined that the appropriate level of analysis for this proposal is an environmental impact statement (EIS). The third scoping effort was conducted on October 17, 2003 soliciting public comments on the proposed EIS.

Using the comments from the public, and other agencies, the interdisciplinary team developed issues to address. The issues are described below.

*Access:* Access to the stream restoration portion of the project area is a significant issue for alternative development. Several items relating to access are dependent upon whether or not an agreement is reached providing access through the Hauns Trust Lands, also known as the 'Paystreke Claim' that spans Resurrection Creek valley just north or downstream of the project area. Bridge location and road construction are both dependent on whether or not there is an agreement. This issue has been addressed through the design of alternatives. Effects to the various resources from the type of access in each alternative are discussed by resource in the FEIS.

*Mining History:* The mining history of the area contributes to the sense of place of the Hope community. Hope residents have expressed concerns about losing the mining character through implementation of the project. Some are concerned about a potential decrease in tourism.

*Recreational Gold Panning Opportunities:* Recreational gold panning in the project area is a popular activity. Continuation of recreational gold panning in areas of the project that would be restored may impede restoration efforts. This is a significant issue that was addressed in the development of alternatives.

The decision addresses these concerns, as outlined below.

*Access:* In regards to access, the decision is to access the project area through the Hauns Trust Lands. The landowner shall provide an access easement to the Forest Service and its construction workers through the Hauns Trust Lands for purposes of accessing upstream National Forest land to implement the project. Access would occur on a designated route on the east side of Resurrection Creek, extending from the north to the south end of the property. The access agreement allows the Forest Service to meet project objectives while minimizing the amount of ground disturbance and provides the most economically efficient means to do so. The access portion of the decision also has the least impacts to users of the Resurrection Pass National Recreation Trail.

*Mining History:* Restoration activities would cause a loss of 0.9 miles of tailings, as well as scattered surface and potential sub-surface artifacts. In addition, indirect of lost revenue for the community from a reduction in archaeo-tourism. The reduction of recreational gold panning in the project area may cause concentration of recreational miners to other areas, potentially increasing damage and looting of heritage resources located outside the project area. Interpretation would increase archaeo-tourism and showcase the community's history, educate the public on the value of heritage resources.

*Recreational Gold Panning Opportunities:* Under Alternative 2 approximately .48 miles of stream would remain open to gold panning and 1.28 miles would be closed under a Forest Supervisor's closure order. The area open to recreational gold panning use would meet most users' expectations though some users would be displaced. The closure order would also consolidate recreational gold panning use to an easily accessible area making enforcement of regulations more probable. The effects of prohibiting gold panning would be reduced by providing interpretive displays, creating an interpretive historic mining cabin, and revising the gold panning brochure to encourage gold panning in the designated areas north of the Haun Trust Lands. Interpretation will focus on historic mining, how and where to pan gold, a description of the stream restoration process and how a restored river will improve the riparian habitat of Resurrection Creek.



## ***Mitigation and Monitoring***

The following mitigation and monitoring measures are incorporated as a component of this decision to avoid and minimize environmental impacts during project implementation as illustrated in Chapter 2 of the Resurrection Creek Stream and Riparian Area Restoration Project Final Environmental Impact Statement.

<b>Resource</b>	<b>Mitigation</b>
<b>Hydrology <i>Bridges</i></b>	Best management practices (FSH 2509.22, Soil and Water Conservation Handbook) would be used to minimize sediment input into the creek during construction of bridge abutments, bridge piers, and decking of the bridge. BMPs would also be used to avoid stream sedimentation during removal of these temporary bridges. Bridges would be clear span structures with abutments sufficiently offset from the ordinary high water line to preclude armoring the bank to protect the structure. The bridge crossing site on Resurrection is constrained by coarse placer tailings. In-water work areas for bridge construction and removal would be isolated from flowing waters of Resurrection and Palmer Creeks with silt curtains or similar techniques to control sedimentation. Bridges and/or culverts installed would be large enough to provide for the free passage and spawning activities of anadromous fish, and would be positioned to minimize changes in the direction or velocity of stream flow.
<b>Roads and <i>Trails</i></b>	Road reconstruction and the relocation/reroute of the Resurrection Pass Trail would be designed and constructed using BMPs. Of primary importance would be limiting the concentration of runoff waters on the road and trail surfaces. Gravels from existing tailings piles in the project area could be used for road overlay and improved drainage. Establishing adequate water conveyance under the road for the multiple small side slope cross drainages, as well as facilitating drainage surface runoff off the road would be necessary.
<b>Channel work and diversions</b>	Channel and floodplain excavation and grading would be done "in the dry". Where excavation and grading work takes place immediately adjacent to Resurrection or Palmer Creeks, a construction berm or silt fence would be used to keep construction related sediment runoff out of the creek. Stream diversions and their associated turbidity plumes would be limited to a minimum number. All stream diversions would occur during ADNR's instream construction timing window, between May 15 and July 15 to minimize impacts to spawning or rearing salmon.
<b>Stream <i>Crossings</i></b>	Stream crossings by equipment would be minimized in number and location, and would be situated at stream sites that would be restored as part of the larger project. Stream crossings would be made from bank to bank, perpendicular to the direction of stream flow.
<b>Fuel Storage</b>	Any fuel storage facility for petroleum and petroleum products would be located a minimum 100 feet from anadromous waters and would meet ADEC standards.

<b>Resource</b>	<b>Mitigation</b>
<i>Bank Stabilization and Work Areas</i>	All bank cuts, fills, and exposed earthwork adjacent to wetlands or water bodies would be stabilized to prevent erosion and sedimentation that might occur during or after construction. Work areas for road/parking construction, tailings sorting, timber harvesting, and soil and tailings removal and placement would be isolated from Resurrection and Palmer Creeks with silt fences or similar devices to prevent sedimentation of the surface waters.
<i>Effectiveness Monitoring</i>	Effectiveness of mitigation techniques would be reviewed at the end of each construction season with ADNR-OHMP and improvements, if applicable, incorporated into plans for the next season.
<i>Mercury</i>	Mitigation measures to be employed to avoid adverse effects from mercury during channel construction include: Prohibit excavation down to false bedrock (a clay layer within the valley bottom) where elemental mercury beads are most likely to reside.
	Keep a mercury cleanup kit on site in order to remove any concentrations of elemental mercury discovered during construction. Assure that Forest Service personnel are on the ground during all excavation work, and that those persons are trained in both recognition of elemental mercury, and cleanup techniques. Both a Forest Service contracting officer and archeologist(s) would be on site during construction.
	Wherever possible reconstruct channel segments "in the dry."
	Sediment surges from connection of constructed channel segments to Resurrection Creek would occur during the period from May 15 - July 15 when water levels are high on Resurrection and Palmer Creeks, and dilution factors are greatest.
	Water and fine sediments within previously constructed side channels in the project area were sampled in 2004 and showed low mercury levels. During construction, additional sampling of fine-grained sediments would occur to assure that anomalously high mercury concentrations are not present. All mercury sample data would be made available to interested agencies and parties.
<i>Navigability and Potential State Ownership of the River Bed</i>	Rerouting of Resurrection Palmer Creeks and construction of engineered debris jams would be accomplished in a manner that would not diminish the navigability of these streams or impair or impede the ability of the public to navigate the water bodies. Materials taken from below ordinary high-water mark of Resurrection and Palmer Creeks would be kept to a minimum and would be replaced below the ordinary high-water mark.
<i>Tailings Waste/Parking Area</i>	Tailings would be retained within the project area. Most tailings would be recontoured on site. Up to 20,000 CY could be wasted onto the private lands within the project area.
<b>Minerals</b>	Protection of all known mineral improvements by specifications in construction contracts is required.
	Provide the claim holder with reasonable access routes in order to carry out necessary mineral associated activities.



Resource	Mitigation
<b>Ecology</b>	All mechanized equipment will be cleaned and free of all foreign plant materials and soil prior to being moved into the project area.
	Only native species will be used to replant and revegetate the project area.
	Any fill material that is brought on site should be known to be free of noxious weed, non-native species, or exotic plant species seeds or materials.
<b>Fisheries</b>	The use of mechanized equipment within the ordinary high-water mark would be held to a minimum. Approved equipment would be limited to loaders, tracked excavators and dozers with GVW no greater than 120,000 lbs., portable winch, power saws and hand tools. Heavy equipment will be cleaned and free of leaks before use in the stream channel. BMP VM-2
	A spill containment plan would be prepared and approved before operations would start. The plan would require absorbent booms and diapers to be available on-site in case of petroleum leaks or spills. Refuel equipment will be stored at a site at least 100 feet from water bodies. BMP W-4.
	Control methods such as diversion of water away from excavation sites, use of filter fences, temporary settling ponds, and check dams would be required in order to minimize downstream sedimentation and turbidity. BMP R-13.
	Erosion control methods such as coarse mulch, willow cuttings and native grass would be applied to areas of exposed or disturbed ground in order to reduce surface soil erosion and sedimentation. BMP VM-3.
	Access roads would be rehabilitated upon completion of the project. These roads would be water-barred and seeded with native grasses in order to prevent noxious weed infestation. The dispersed sites along these access roads would be rehabilitated to block vehicular access to the river's channel. BMP R-7, R-23.
	Access points used to allow heavy machinery to enter streams will be rehabilitated and protected following use. This will include shaping the disturbed area to a stable configuration, revegetation, and applying rock or woody debris where necessary to further protect the site from subsequent erosion, and to block vehicular access to the stream. The objective of this is to limit erosion and sediment delivery from disturbed areas immediately adjacent to the stream.
	In stream work would be limited to the time period designated on the Hydraulic Permit by the State. In stream work is proposed for and would be limited to mid-May through mid-July.
	Fish stranded in dewatered sections will be rescued and transported above the project area.
	Site-specific areas such as islands above the 50-year floodplain would be mulched or have blue joint sod mats applied. Overstocked sapling stands of spruce and cottonwood growing in areas of adequate soils would be thinned. Thinned material would be used as coarse mulch



Resource	Mitigation	
	throughout the new floodplain. Natural vegetation of mechanically disturbed areas will be promoted where seed source and site conditions are favorable. Native plant species originating from local genetic stocks would be planted in areas where natural re-vegetation conditions are not favorable	
Heritage	If heritage resources are found during construction, then construction would cease until a plan is made on how to deal with the specific relic.	
Recreation/ Scenery	Appropriate signing or other cautionary measures will be implemented in conjunction with all management activities to notify the public of restoration activities. Implementation of these measures will be the responsibility of the person initiating the action (e.g., equipment contractor, logging contractor, etc.)	
	Notify the National Recreation Reservation Service 8 months prior to project initiation. This will enable the service to notify recreationists who rent any of the nine public use cabins on the Resurrection Pass trail of the restoration activities.	
	No equipment associated with the restoration project will be staged at the trailhead or dispersed camping area.	
	On Saturdays and Sundays, no heavy equipment operations would occur within ¼ mile of the Resurrection Pass National Recreation Trail.	
	Mitigation	Design Feature (method to accomplish mitigation)
Wildlife	Maintain/develop a balance of different vegetation types, age classes, and habitat components (increase large trees, snags, downed logs). Retain largest old cottonwoods for bald eagle nesting habitat.	Retain 50% of current spruce and cottonwood 15"-24.9" dbh. Retain all cottonwood > 25" dbh. Retain 15+ snags/acre (largest available, preferably hardwoods). Retain 120+ pieces of downed wood/ acre (largest available) Snags/acre estimated as a midpoint between minimum forest plan guidelines and numbers found in the reference reach which is higher than normal due to the spruce bark beetle. Logs/acre between minimums in forest plan, and those found in the reference reach, based on recommendations from Brian Bair for restoration needs.
	Maintain or increase early successional hardwood habitat for moose and lynx.	Patch cuts to encourage natural birch regeneration from seed sources. Develop moose ponds at sod source sites if the water table allows.
	Maintain existing wildlife habitat if	Follow forest plan guidelines

Resource	Mitigation	
	new nests or important habitat areas are located during project implementation.	
	Reduce potential bear/human interactions after project completion	Develop screened foraging habitat for bears along the creek from the Resurrection Pass Trail.

Resource	Monitoring Measure
<b>Ecology</b>	Monitoring for introduction of new populations or increases of known existing non-native species populations will help in determining if project activities are affecting these populations.
<b>Heritage</b>	A heritage resource person will be on site to monitor construction activities on a daily basis.
<b>Recreation</b>	Potential conflicts between contractor and recreational trail users will be evaluated periodically throughout the project to assure user safety. If conflicts occur between trail users and restoration efforts, specific operating hours may be established for the contractor.

## ***Findings Required by Other Laws and Regulations***

### ***Forest Plan Consistency***

This decision to restore 0.9 miles of Resurrection Creek's channel, floodplain and streamside vegetation to pre-mining conditions and enhance fish and riparian wildlife habitat on public and private lands; is consistent with the intent of the Chugach National Forest Revised Land and Resources Management Plan long term goals and objectives pertinent to this project from. The project was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines for the following resources. (Forest Plan, Chapter 3)

#### **Soil Resources**

*Goal:* Improve soil conditions where they have been degraded.

#### *Objectives*

- Where monitoring identifies areas of degraded soil conditions, apply site-specific restoration measures or recreational closures to improve the conditions.

- Accomplish watershed restoration activities where degraded watershed conditions exist.

### **Water, Wetland and Riparian Areas**

*Goal:* Provide for the proper functioning of streams, riparian areas, lakes, and wetlands.

#### *Objectives*

- Determine the current condition of aquatic ecosystems.
- Restore riparian habitat and near stream vegetation where it has been determined that the stream's proper functioning condition is outside the historic range of variability.

### **Ecological Systems Management**

*Goal:* Maintain a full range of naturally occurring ecological processes and flora native to South-central Alaska including a variety of vegetation types, patterns and structural components.

#### *Objectives*

- Develop a baseline estimate of current vegetation types, patterns and structural components on the Chugach National Forest. Monitor changes to these components to determine how well the plan is maintaining desired landscape conditions.
- Restore vegetation on landscapes affected by activities, natural events or processes to meet desired conditions.

### **Management of Fish and Wildlife Habitat**

*Goal:* Maintain habitat to produce viable and sustainable wildlife populations that support the use of fish and wildlife resources for subsistence and sport hunting and fishing, watching wildlife, conservation, and other values.

#### *Objectives*

- Implement standards and guidelines to protect species and their habitats through protection, conservation and restoration of important terrestrial and aquatic habitats.
- Create early to mid-successional habitat for moose and other early and mid-seral dependent wildlife species.
- Provide educational information for recreationists and others traveling in and through the Chugach National Forest on appropriate actions to avoid disruption to wildlife species.
- Improve fish habitat quality on streams, lakes and ponds at selected areas on the Chugach National Forest for sport, subsistence and personal uses.



### **Heritage Resources**

*Goal:* Protect heritage resources.

*Objectives*

- Implement management area direction for protection and data recovery from heritage resources.
- Work with the State Historic Preservation Officer and tribal governments to develop programmatic agreements addressing management activities common to the Chugach National Forest, including special use permits, small-scale mining, forest restoration activities, recreation and trail developments, and fish and wildlife habitat manipulation.
- Implement the programmatic agreement between the Forest Service and the State of Alaska Historic Preservation Officer.
- Work cooperatively with Native groups, local communities and the State Historic Preservation Officer to enhance historic and prehistoric values on the Forest.
- Prioritize heritage inventory and assessment to develop scientifically based predictive models for the Kenai Peninsula and other Forest geographic areas subject to active management or use.

### **Recreation Resources**

*Goal:* Provide recreation opportunities for interpretation and education as related to all Forest resources.

*Objective*

- Provide user education, resource interpretation; leave no trace principles, and visitor information through a variety of means both on and off the Forest.

### ***Revised Land and Resource Management Plan Desired Condition for the Kenai Peninsula Geographic Area***

#### **Fish and Wildlife**

Anadromous fish runs of sockeye, pink, coho, and king salmon, along with Dolly Varden char and eulachon are abundant in the waters of the Kenai Peninsula. Resident populations of rainbow trout, lake trout and Dolly Varden char along with grayling and whitefish are sustained in the waters of the Chugach National Forest. Degraded fish habitat in Resurrection Creek will have restored productivity.

#### **Recreation and Tourism**

Improvements such as bridges, trails, trailheads, expanded campgrounds, and new cabins will extend the ability of the Kenai Peninsula to accommodate increased summer recreation use without diminishing the area's natural quality.

### *Organic Administration Act, and 1872 Mining Law, as amended*

The Organic Administration Act requires the Forest Service, as the land manager, to minimize environmental impacts without materially interfering with a mining claimant's rights under the General Mining Laws. The 1872 Mining Law, as amended, confers a statutory right upon a mining claimant to enter upon public lands to prospect, develop and mine valuable minerals. A federal mining claim exists on the south boundary of the project area, and care must be taken to respect the claimant's property by avoiding claim corner markers, excavations, and mining equipment. The claimant should also be provided reasonable access routes in order to carry out necessary mineral associated activities.

The project area is part of the "acquired lands" property known as the Old St. Louis Claims. Acquired lands are not subject to the 1872 mining laws since they are not open to mineral entry. This means that mining claims cannot be located on these lands. There is no authority that allows the public to take valuable mineral deposits from lands withdrawn from mineral entry or acquired lands. The key words here are "valuable mineral deposits". The disposal of "valuable mineral deposits" from withdrawn or acquired lands can only be accomplished through leasing or permitting. Recovering small amounts of gold "Recreational gold panning" is allowed under the authorities designated to the Forest Service. Recreational gold panning includes panning, sluicing, and dredging with a four-inch or smaller diameter hose. The operating plan for recreation gold mining areas for the Forest was completed in 1996.

## **Permits and Licenses**

Permits Needed for the Resurrection Creek Channel and Riparian Restoration Project

### **Alaska Department of Natural Resources**

*Office of Project Management and Permitting (OPMP):* This office oversees State and Federal permitting as pertains to the Alaska Coastal Management Program (ACMP). The Project Area lies within the "Coastal Zone" and project activities must be consistent with the intent of the ACMP. OPMP coordinates and compiles the State, Federal, and District (Kenai Peninsula Borough) permit reviews by various agencies. A Project Consistency Determination by OHMP generally requires that all relevant permits will be approved by the permitting agencies involved with the Project. After publication of the Draft EIS for the Resurrection Creek Stream Restoration Project, OHMP distributed the document to other permitting agencies, and arranged a pre-project meeting with interested agencies to discuss permitting needs.

*Office of Habitat Management and Permitting (OHMP):* This office enforces Alaska Statute (AS) 41.114, Section 870 – "protecting freshwater anadromous fish habitat", and Section 840 – "providing free passage of anadromous and resident fish in fresh water bodies". Under a Memorandum of Understanding between the ADNR and the Forest Service (98 MOU-10-011) OHMP will submit a letter of concurrence to the Forest Service if the proposed Forest Service project will be conducted in concurrence with Title 41 requirements. . The letter of concurrence may spell out the required conditions



needed for the project to take place. OHMP can ask for assistance in review from the Alaska Department of Fish and Game.

*Division of Mining, Land, and Water:*

1. Water Use Permit. The Water Division oversees applications for water rights and temporary water use permits for use or diversion of the waters of the State of Alaska. Proposed diversions of Resurrection Creek will need to be reviewed by the Division of Water, and may require a temporary water use permit for stream water diversions occurring under the project.
2. Navigability: The State of Alaska claims ownership of the bed of all “navigable” water bodies on Federal Lands in Alaska. The Forest Service maintains ownership of bed of all “non-navigable” water bodies situated on National Forest System Lands. The US BLM makes the official determination and ruling on whether a water body is considered “navigable”. However, the ADNR frequently makes a determination of navigability previous to a final ruling by the BLM, particularly if it is in the State’s interest. After review of the DEIS, ADNR, Division of Mining, Lands and Water determined that the portion of Resurrection Creek located in Sections 21 and 28 of T. 9 N., R. 2 W., S. M., and the portion of Palmer Creek in Section 21 (including all of the project area) to be navigable according to the State’s standards. Refer to the ADNR’s letter of 3/16/2004 in Appendix A.
3. Temporary Land Use Permit: Since ADNR determined Resurrection and Palmer Creeks within the project area to be navigable, they therefore claim State title to the bed of the creek. Accordingly, ADNR’s South-central Regional Office requests a temporary Land Use Permit for activities taking place on the bed of those creeks within the project area. The proposed Resurrection Creek Stream Restoration Project would actually increase the length of Resurrection Creek through the project area (by increasing stream sinuosity). If Resurrection Creek is also determined navigable by the USBLM, this would mean that implementation of the project would increase the area of the streambed, and cause a conversion of some National Forest System Lands to State Lands. The Forest Service takes the position that not until such time as the USBLM makes a final determination of navigability would there be clear title to the bed of these creeks by the State of Alaska.

**State Historic Preservation Office (SHPO):** Section 106 of the National Historic Preservation Act requires review of any project funded, licensed, permitted, or assisted by the federal government for impact on significant historic properties. The agencies must allow the State Historic Preservation Officer and the Advisory Council on Historic Preservation, a federal agency, to comment on a project. The Alaska Historic Preservation Act contains a provision similar to Section 106, which mandates that any project with state involvement be reviewed in a similar manner. Forest Service cultural resources specialists evaluated historic features on the proposed Resurrection Creek restoration project area, and determined that the site was not eligible for nomination to the National Register of Historic Places. On October 7, 2004, the SHPO concurred with this determination, and stated that no historic properties would be affected by the Resurrection Creek Stream Restoration Project.



**U.S. Army Corps of Engineers, Regulatory Division (ACOE):** This project falls under the regulations of Section 404 of the Clean Water Act as concerns dredge and fill within wetlands. The project will need a Jurisdictional Determination by ACOE to determine if it qualifies under a Nationwide Permit (#27 – for restoration of fish and wildlife habitat) or will require an individual permit. In either case, project construction would need to follow ACOE practices for minimizing impacts to wetland areas. This Section 404 permitting process requires approval of a Section 401 (Water Quality) permit from the Alaska Department of Conservation. Both ADEC and the Corps will need to review proposed practices for the project to assure minimization of project impacts to water quality.

**Alaska Department of Environmental Conservation:** The ADEC enforces the water quality standards of the State of Alaska. ADEC must approve a Clean Water Act Section 401 permit to assure the project complies with State Water Quality Standards. The permit can place stipulations on techniques used during project construction. ADEC works with the ACOE to evaluate Section 401 compliance. USEPA can oversee the Section 401 Permitting if they see the necessity.

**Kenai Peninsula Borough:** ACMP consistency requires that the project meet the policies of the Kenai Peninsula Coastal Management Plan. During the project consistency review, the Borough reviews the proposed project to assure it meets Borough Policies. Lacking consistency, the Borough can ask for modifications to the plan. In their 5/13/04 letter to ADNRP-OPMP, the Borough voices “no objection to the proposed project” based on the mitigation measures proposed for construction in the project DEIS (see Appendix A).

**U.S. Fish and Wildlife Service, Ecological Services:** Since Resurrection Creek is an anadromous stream, USF&WS is involved in the ACMP Permitting Process and can submit comments and recommendations to OPMP during project review.

**National Marine Fisheries Service:** Since Resurrection Creek is an anadromous stream, NMFS is involved in the ACMP Permitting Process and can submit comments and recommendations to OPMP during project review. In relation to essential fish habitat (EFH), Brian Lance of the NMFS has written the Forest Service (7/7/04) and stated that:

*“The NMFS has reviewed the biological assessment and EFH determination for the Resurrection Creek Rehabilitation project. The described action will have no more than a minimal impact and will not result in any substantive adverse effect to EFH. No further EFH Assessment is required and NMFS does not offer any EFH Conservation Recommendations. Further EFH consultation is not necessary. NMFS has no objection to the project.”*

**Watershed Restoration and Enhancement between Ralph Edgar Haun as trustee of The Ralph Edgar Haun Declaration of Trust, dated June 9, 1995 and the USDA Forest Service:** This agreement between the land owner of the Haun Trust Lands and the Forest Service (and under authority of the Wyden Amendment) was signed on October 27, 2004. Under the agreement, the landowner provides a permit to the Forest

Service for up to 3 years of construction access and up to an additional two years of revegetation and monitoring access through the Haun Trust Lands on a designated route on the east side of Resurrection Creek. The Forest Service agrees to implement channel restoration and flood control measures at the southern end of the Haun Trust lands, and to waste excess tailings at designated uplands sites on the property.

## ***Implementation***

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### *Implementation Date*

This project will be implemented on 105 days from date of legal notice if an appeal is filed. If no appeal is filed, then the project would be implemented 60 days from the date of the legal notice.

### *Administrative Review or Appeal Opportunities*

This decision is subject to appeal in accordance with 36 CFR 215. A notice of appeal must be in writing and clearly state that it is a Notice of Appeal being filed in pursuant to 36 CFR 215. Appeals must be addressed to

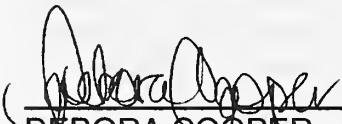
Debora Cooper,  
Seward District Ranger  
334 4<sup>th</sup> Avenue  
P. O. Box 390  
Seward, AK 99664

within 45 days of the date of legal notice of this decision in the Anchorage Daily News.

### *Contact Person*

For additional information concerning this decision or the Forest Service appeal process, contact

Dave Blanchet,  
Project Coordinator,  
3301 C Street, Suite 300  
Anchorage, Alaska 99503-3998  
[dblanchet@fs.fed.us](mailto:dblanchet@fs.fed.us)  
(907)-743-9358

  
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DEBORA COOPER  
Seward District Ranger  
Seward Ranger District  
Chugach National Forest

11.4.04  
[DATE]

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